1. **The mind-body connection**
   It sometimes is helpful to keep a diary to record symptom flare-ups and especially, any triggers such as emotional or situational stress.

   Stress management. There are certain stress management techniques such as meditation that can be helpful.

   Hypnosis. This is an old form of therapy that may be useful in some instances to refocus thoughts away from pain and to teach the patient to react or think differently.

   Behavioral Therapy. A patient can change thoughts, perceptions and behavior using proven techniques.

   Discuss these treatment options with the physician. At times, a counselor or psychologist may be helpful.

2. **Medications**
   Certain anti-depressant medications can help stimulate the brain to increase certain nerve signals which are sent down to the control center at the base of the brain. These signals may act to block the pain nerve impulses which are being sent up from the abdomen. Some people don't want to take these medications because they say they are not depressed. It is important to note that depression is not the reason the medicine is given. Rather it is to stimulate the brain in the manner mentioned.

   One category of medications is the tricyclic antidepressants such as Elavil (amitryptyline) or Desyrel (trazodone). These drugs often take several weeks to reach their full effect so persistence and patience is necessary. There may be some initial drowsiness, but this generally leaves after several days. Other side effects include dry mouth and constipation.

   Another category of drugs is called selective serotonin reuptake inhibitors (SSRI). These include Prozac, Paxil, Zoloft and others. They occasionally can cause sleep disturbances, restlessness and diarrhea. These side effects are often temporary and the medicines should be taken until the full effect is known.

Summary

CFAP can be a distressing and frustrating condition for the patient. It is caused by excessive stimulation of pain nerve fibers within the abdomen. The important point to remember is that testing usually reveals no serious underlying disorder and that surgery is not helpful. There are beneficial techniques that can control how a person responds to these pain signals. There are also medications that can alter the brain's perception of these abnormal nerve impulses. By working with the physician, effective control of this problem can usually be developed.

CHRONIC FUNCTIONAL ABDOMINAL PAIN

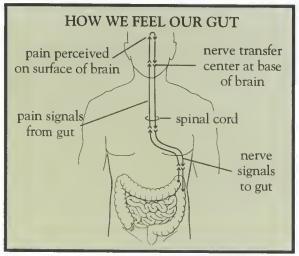
Chronic Functional Abdominal Pain

Medically, the problem of chronic abdominal pain is called chronic functional abdominal pain (CFAP). The word functional means that there is no disease present in the abdomen but rather that the symptom of pain is due to the abnormal function or physiology of the GI tract and how it relates to the brain.

The Gut

The small intestine begins at the stomach and is about 20 feet long. It is where nutrients and vitamins are absorbed. The colon or large bowel which follows is 5-6 feet long. The liquid stool which enters the colon normally becomes dehydrated as it passes around to the rectum.

How the intestine functions is a bit complex. First, there are pacemaker nerve cells in the muscles within the wall of the intestine. These can initiate intestinal contractions. In addition, there are nerves that go to and from the intestine, on to the spinal cord and then to the lower control center of the brain. Finally, there are hormones or chemicals within the intestines which seep into the blood and then influence the action of the intestine. All of these factors, plus the types of foods we eat, and, yes, stress in almost



any form can influence how the intestine works. Most importantly, they can affect the signals that reach the upper, outer surface of the brain where each of us perceive what is happening to and within our body.

Symptoms

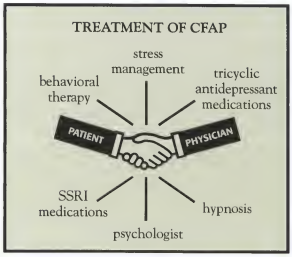
The patient with CFAP will usually have had the pain for a very long time. The pain is often a dull achy type rather than sharp or severe enough to go to the hospital emergency room. Often, there will have been multiple previous abdominal surgeries. For reasons unknown, the patient is often a female. There is a surprising incidence of physical or sexual abuse in childhood in these patients. Features such as weight loss, fever or rectal bleeding are not present. In fact, the outstanding feature is the presence of very real pain when nothing can be found to explain it. This is what can make the problem so frustrating. The pain is very real. It is not imagined. Yet, the physician can find nothing wrong.

So What is CFAP?

Chronic functional abdominal pain occurs when signals from the gut reach the outer awareness part of the brain indicating that something is wrong, when, in fact, nothing is. This condition sometimes is called hypergesia, hyper - meaning excessive - gesia meaning feeling. So, there are excessive signals from the intestinal nerve fibers going upstream to the brain. These are not imagined. They are real and people who have them experience real discomfort. In a very real sense, the problem is with the wiring within the gut and to the brain.

What CFAP is Not

Of course, it is possible for a person to have CFAP and also some other GI disorder such as hiatus hernia, diverticulosis or Crohn's disease. Each of these has their own set of symptoms which usually are different than those of CFAP.



At times, it is tempting to ascribe the pain of CFAP to one of these conditions. However, correcting one of these latter disorders does not clear the abdominal pain that occurs with CFAP.

Testing

In almost every case of CFAP, extensive medical testing will have been done. This usually includes x-rays, sonograms, CT scans, upper and lower endoscopy and blood studies. Nothing much ever turns up, except perhaps for incidental diverticulosis or a hiatus hernia. The pain is so real to patients that there is always a hope that an additional test will turn up something that can be fixed by medicine or surgery. As noted, surgery will often have been done looking for a cause of the pain. But then the pain comes back, sometimes worse than before surgery.

How About Treatment?

The goal of treatment is to gain control of symptoms and to improve the quality of daily life. It is usually not possible to eliminate the pain altogether. However, the treatment plan, hopefully, can control the discomfort enough to allow a better quality of life. Treatment is usually divided into two parts.